

#### Absolute maximum ratings

(Ta=25°C)

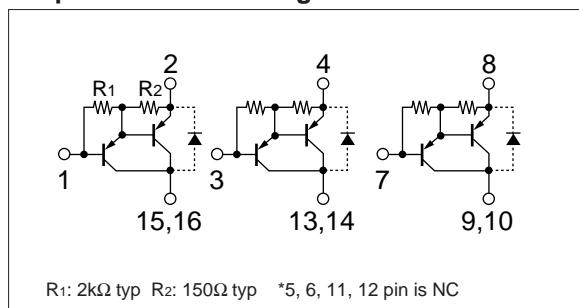
Symbol	Ratings	Unit
V <sub>CBO</sub>	-60	V
V <sub>CEO</sub>	-60	V
V <sub>EBO</sub>	-6	V
I <sub>c</sub>	-4	A
I <sub>CP</sub>	-6 (PW≤1ms, Du≤50%)	A
I <sub>B</sub>	-0.5	A
P <sub>T</sub>	2.6 (Ta=25°C)	W
T <sub>j</sub>	150	°C
T <sub>stg</sub>	-40 to +150	°C

#### Electrical characteristics

(Ta=25°C)

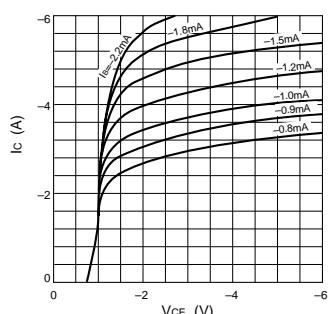
Symbol	Specification			Unit	Conditions
	min	typ	max		
I <sub>CBO</sub>			-10	μA	V <sub>CB</sub> =-60V
I <sub>EBO</sub>			-10	mA	V <sub>EB</sub> =-6V
V <sub>CEO</sub>	-60			V	I <sub>c</sub> =-10mA
h <sub>FE</sub>	2000		12000		V <sub>CE</sub> =-4V, I <sub>c</sub> =-3A
V <sub>CE(sat)</sub>			-1.5	V	I <sub>c</sub> =-3A, I <sub>B</sub> =-6mA
V <sub>BE(sat)</sub>			-2.0	V	
V <sub>FEC</sub>			1.8	V	I <sub>FEC</sub> =1A
t <sub>on</sub>		0.4		μs	V <sub>CC</sub> =-30V,
t <sub>stg</sub>		0.8		μs	I <sub>c</sub> =-3A,
t <sub>f</sub>		0.6		μs	I <sub>B1</sub> =I <sub>B2</sub> =-10mA
f <sub>r</sub>		200		MHz	V <sub>CE</sub> =-12V, I <sub>E</sub> =0.2A
C <sub>ob</sub>		75		pF	V <sub>CB</sub> =-10V, f=1MHz

#### ■ Equivalent circuit diagram

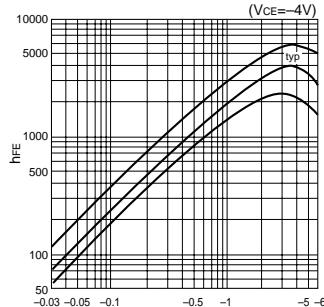


#### Characteristic curves

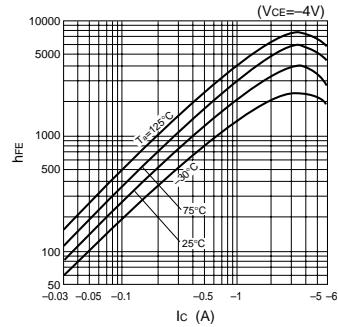
##### I<sub>c</sub>-V<sub>CE</sub> Characteristics (Typical)



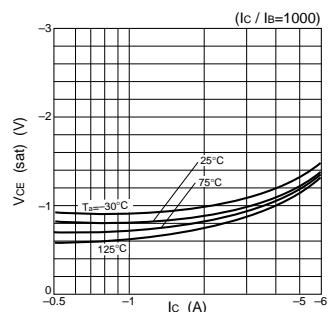
##### h<sub>FE</sub>-I<sub>c</sub> Characteristics (Typical)



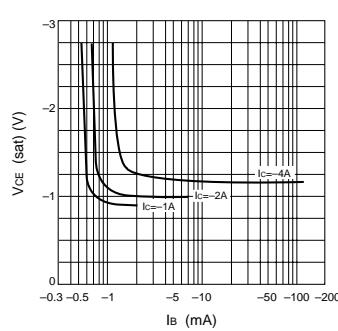
##### h<sub>FE</sub>-I<sub>c</sub> Temperature Characteristics (Typical)



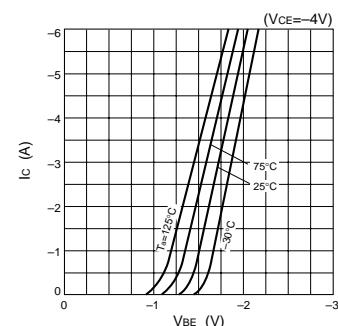
##### V<sub>ce(sat)</sub>-I<sub>c</sub> Temperature Characteristics (Typical)



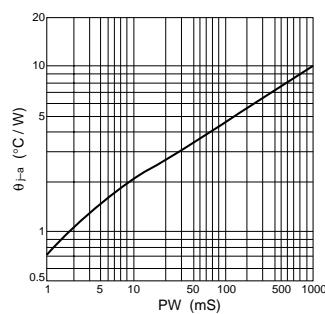
##### V<sub>ce(sat)</sub>-I<sub>b</sub> Characteristics (Typical)



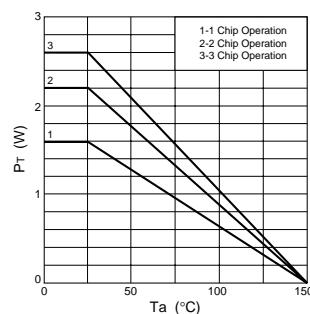
##### I<sub>c</sub>-V<sub>be</sub> Temperature Characteristics (Typical)



##### θ<sub>ja</sub>-PW Characteristics



##### P<sub>T</sub>-Ta Characteristics



##### Safe Operating Area (SOA)

